

CLAIMS

1. In a color image transmission system between a pair of computer image processing systems A and B, a method for calibrating color of a digital image in image transmission whereby color of a digital image indicated on a monitor of either one of said systems A & B is corrected to a color being substantially matched to color of an original color image which is transmitted from the other one of said systems A & B, comprising:

after preparation of a basic color image Z being common to said systems A & B, a preparatory operation of setting a correction value which is applied to said operation of calibrating color of said digital image indicated on said monitor, by using said common basic color image, and

a color matching operation applied to any digital image indicated on said monitor of either one of said systems A & B by applying said correction value in a condition of confirming the transmission pattern, whereby color of said digital image is corrected to a condition that said color of the corrected digital image is substantially matched in view to color of said original color image before transmission.

2. A method for calibrating color of a digital image in transmission between a pair of computer image processing systems A & B according to claim 1, wherein said transmission of a digital image is carried out from said system A to said system B,

said preparatory operation to set correction value α comprising:

a first step of scanning said basic color image Z by a scanner of said system A so that a digital image of said basic color Z is indicated on a monitor of said system A,

a second step of transmitting digital data of said digital image to said system B by way of an MO disc so that a digital image Z₁ is indicated on the

monitor of the system B, and

a third step of carrying out a color matching operation of the digital image Z_1 out by conventional method so that a color modified digital image Z_2 having a color substantially matched to the color of the common basic color image Z is indicated on the monitor of the system B, then setting said correction value α based upon the color data deviated from initial color data indicated on said monitor before applying said color matching operation, said color matching operation comprising:

a fourth step of scanning an original color image X whereby digital data of said original color image X is stored in a computer of said system A,

a fifth step of transmitting said digital data from said system A to said system B by way of an MO disc whereby a digital image X_1 is indicated on the monitor of said system B, and

a sixth step of applying a color matching operation to said digital image X_1 by applying said correction value whereby a color modified digital image X_2 , having color substantially matched in view to the color of said original color image X is indicated on the monitor of said system B.

3. A method for calibrating color of a digital image in transmission between a pair of computer image processing systems A & B according to claim 1, wherein said transmission of a digital image is carried out from said system A to said system B, a color matching operation to indicate a digital image having a color substantially matching the color of an original color image being carried out before said transmission,

said color matching operation comprising:

a preparatory operation to set a correction value β which is applied to said color matching operation by using said common basic color

2025 RELEASE UNDER E.O. 14176

image Z, said preparatory operation comprising:

a first step of scanning said basic color image Z by the scanner of said system A whereby a digital image Z₁ is indicated on the monitor of said system A,

a second step of applying a conventional color matching operation to correct the color of said digital image Z₁ whereby a color modified digital image Z₂ having a color matched to the color of the basic color image Z is indicated on the monitor of said system A, and

a third step of setting a correction value β based upon color data deviated from initial color data indicated on said monitor before applying said color matching operation,

whereby in color matching operation, a digital image X₁ having a color substantially match in view to the color of an original color image X is created from a digital image X₂ indicated on the monitor of the system A by applying said correction value β to said color matching operation.

4. A method for calibrating color of a digital image in transmission between a pair of computer image processing systems A & B according to claim 3, wherein

said preparatory operation to set correction value γ comprises:

a first step of storing digital data of said digital image Z₁ on an MO disc,

a second step of transmitting said digital data of said digital image Z₁ to said system B by way of said MO disc so that a digital image Z₃ is indicated on the monitor of said system B, and

a third step of applying a conventional color matching operation to said digital image Z₃ whereby a color modified digital image Z₄ is indicated on the monitor of said system B, said correction value γ then being set based upon color data deviated from initial

color data indicated on the monitor of said system B before applying said color matching operation,

said color matching operation applied to a digital image X_3 indicated on the monitor of said system B by transmitting said digital image X_3 indicated on the monitor of said system A being carried out by applying said correction value γ whereby a digital image X_4 having a color substantially matched to the color of the digital image X_3 indicated on the monitor of said system A is indicated on the monitor of said system B.

5. A method for calibrating color of a digital image in transmission between said systems A & B according to claim 2 or claim 4,

further comprising successive operations consisting of changing a composition of said digital image X_2 displayed on the monitor of said system B so that a new digital image X_3 is indicated on the monitor of said system B, a preparatory operation carried out before transmitting said digital image X_3 to said system A, and transmission of a digital image created by said preparatory operation, wherein in said operation of changing the composition of said digital image X_2 displayed on the monitor of said system B so that a new digital image X_3 is indicated on the monitor of said system B, and said preparatory operation before transmitting said digital image X_3 to said system A, color modification by a correction value $(-\gamma)$ is applied to said digital image X_3 so that a modified digital image X_4 is indicated on the monitor of said system B, and digital data of said digital image X_4 is transmitted by MO disc from said system B to said system A whereby a digital image X_5 having a color substantially matched in view to color of said digital image X_4 is indicated on said monitor of system A.

6. A method for calibrating color of a digital

4005464304

image transmission between said systems A & B according to claim 1,

further comprising an operation of setting an action program based upon said correction value for automatically and successively carrying out color matching operations on said digital image being a target of color matching operations, and installing said action program in said computers of said systems A & B, whereby said color matching operations of a digital image applied to a plurality of independent color images are successively carried out by said action program.

7. A method for calibrating color of a digital image transmitted between said systems A & B according to claim 1, wherein said basic color image Z is a R.G.B. basic color image.

8. A method for calibrating color of a digital image transmitted between said systems A & B according to claim 1, wherein correction value δ is once set in a case of transmission from said system A to said system B, and a correction value $(-\delta)$ is used as the correction value for carrying out the color matching operation applied to transmit a digital image from said system system B to said system A.